Exhibit 5

UNITED STATES DISTRICT COURT

NORTHERN DISTRICT OF CALIFORNIA

SAN JOSE DIVISION

IN RE: HIGH-TECH EMPLOYEE ANTITRUST LITIGATION

No. 11-CV-2509-LHK

VIDEOTAPED DEPOSITION OF EDWARD E. LEAMER Ph.D.

San Francisco, California

Thursday, December 19, 2013

Volume IV

Reported by:
CARLA SOARES
CSR No. 5908
Job No. 1784254

Pages 1170 - 1489

a median wage variable. Are you familiar with that? 11:28:03

A Yes, I am.

Q And you criticize Dr. Stiroh's use of that because the median wage variable competes with other industry effect in your model; is that correct? 11:28:15

A I don't think I criticized it because it competed with other industry effects.

Q Let's look at paragraph 127 of your December 2013 report.

You state in paragraph 127, "In summary, 11:28:46 I'm extremely doubtful about the usefulness of this median wage variable, and it surely isn't a substitute for the number of new hires which Dr. Stiroh inappropriately omits when she adds this median wage variable. This median wage variable 11:29:04 competes with the other industry effect in my model, employment in the information sector."

Isn't that a criticism of using the median wage variable because it competes with another industry effect in your model? 11:29:23

A No, that's not meant to be. It's just saying that we already have industry effects in the equation through that San Jose employment variable. And this is another industry effect. And it should be thought of as another one of the industry 11:29:37

effects, not as a substitute for this new hire variable. 11:29:40

This is just a little game that statisticians play which is indirect ways of justifying the omission of the most significant variable in the equation, which in this case it's a new hire variable. 11:29:50

And that has, as I said in that -- in reference to that theorem that I published, it has a very predictable effect. So if you omit the most significant variable, you're going to wreak havoc everywhere else in the equation. And you can do the omission in lots of different ways, which is what she's done. 11:30:02

Q But you would agree as a general matter if you're troubled by a variable, including the sign of a variable, you should experiment with alternatives, correct? 11:30:17

A You should not -- not eliminate that variable, but you should compete against that variable, adding another variable that knocks that one out, that explains why that's peculiar. That's what you're obligated to do. 11:30:29

If you -- when you estimate a model with a collinearity problem, you're going to have a lot of 11:30:41

peculiar signs but insignificant coefficients. Then if you're trying to get right signs, then you want to start shrinking the model down, not do it stepwise because we saw what a terrible error that was for the age coefficient, but some wisdom with regard to shrinking the model. That shrinkage doesn't apply to the most statistically significant effect. You can't override the data. 11:30:43 11:30:54

If you think that's the wrong sign, you have an obligation not to throw that out but to find the variable that when it competes with that variable knocks that one out. And we have not found that variable yet. 11:31:06

Q The -- what you're referring to as the most significant is the one that we've been discussing -- we discussed this morning which is the number of new hires, correct? 11:31:18

A That's correct.

Q And the sign on that was the one that caused even you concern, correct? 11:31:30

A It was both statistically significant and a sign that surprised me. So it attracted my attention the same way that the age coefficient attracted my attention.

Q And Dr. Stiroh did not throw out that 11:31:40

variable. She split it up, correct? 11:31:44

A Well, she split it up in a way that threw it out. That's why I said it's a disguised way of throwing it out. The relevant components of variability in that variable have been eliminated by 11:31:56 the way that she split it up, if you want to put it your way.

The proof of that is in the equations that I estimated in which I include her split-up variables and the original variable, the new hire 11:32:06 variable. The new hire variable is as strong as it ever was, and those other two variables that she's propounding are statistically insignificant. They don't change the new hire variable at all.

Q If the new hire variable is wrong contrary 11:32:21 to your theory of impact, then it should be re-examined and you should experiment with eliminating it, correct?

A You want to find the variables -- if it's some peculiar sign that's legitimately peculiar, 11:32:36 which I don't think is the case, you're not allowed to omit this variable. That's overriding the data.

What you want to do is add more variables that will explain -- will capture the component variability that variable is capturing and knock it 11:32:52

components, you can't estimate a model that has the two components and the total. That's what's called a proof -- a collinearity problem. 11:33:50

If you estimate the two components, then you're compelled to eliminate the total, and you want to know what's the relative impact of the two components. 11:34:00

That's not what's happening here because you can still estimate the model, which is my Table 11, a model with that new hire variable in there, with additional two variables that Dr. Stiroh has used, which creates a legitimate statistical horserace between the original variable and these two things that she thinks are a better characterization of what's going on. 11:34:11 11:34:27

If they're better, they're going to win the horserace. They lost miserably.

Q Dr. Leamer, there's a logic to splitting up the new hires between companies that were engaged in a do-not-cold-call agreement with the firm and those that were not. 11:34:40

MR. GLACKIN: Object to the form.

BY MR. RILEY:

Q Do you agree with that?

A Well, there's a surface logic to it, too. 11:34:46

But the statistical problem is a little different from what you seem to understand, which is -- shall I complete it or no? 11:34:51

Q Please go ahead.

A This variable that I have, if you say -- 11:35:01

Q What table are you referring to?

A Table 10, row 30, is my number of new hires variable. That variable is common across all the defendants. It varies only over time. Common across all the defendants, varies only over time. 11:35:23

The two variables that she suggested are in row 28 and 29. These have a component of variability across firms that my variable doesn't have.

Q I'm sorry. You said we're in Exhibit 10? 11:35:40

A Exhibit 10 -- I'm sorry. Table 10. Table 10. Page 72.

Just for the record, what this is is my original estimated model including the total number of new hires variable with Dr. Stiroh's two 11:36:07 additional variables. One is the logarithm of the DNCC new hires, and the other one is the logarithm of the non-DNCC new hires.

And the statistical point I'm trying to make is that row 30, which is the number of new 11:36:24

hires, has variability only over time and not across employees -- not across the seven defendants. 11:36:28

These variables that she's added have both components of variability. They vary across the firms because the firms have different agreements, and they also vary over time. So these are totally different kinds of variables. They're not a substitute for my variable. 11:36:40

A substitute for my variable would be some other variable that has no employee dependence, that varies across time but not across defendants. 11:36:54

Q Yours is total number of new hires over time or just -- I didn't catch your --

A It's aggregated over all seven defendants. The same variable applies to every defendant so there's no variability across defendants. There's only variability over time. 11:37:14

Q And so again, this is an example of the aggregation because massive hiring by one defendant and zero hiring by another is attributed to all the defendants. 11:37:28

MR. GLACKIN: Object to the form.

THE WITNESS: I'm trying to talk about the statistical point here. And as much as you want to disaggregate and you want to think of this 11:37:38

compensation at these seven companies would you expect? 12:51:57

A Again, I want the record to be clear. These are not committed opinions that you have. These are off-the-top-of-the-head opinions. And if the statistics grabs me by the neck and say you're wrong, I'm going to listen to the data. 12:52:06

So this is casual thinking that we're engaged in here. So casually, I would have thought that hiring rates would come with higher compensation. 12:52:21

Q And why is that?

A The same thing. You're sort of measuring the labor market in lots of different ways to see when the labor market is hot and when it's cold. 12:52:30

Q Same thing for the variable in line 28, total number of new hires?

A Correct.

Q Line 29, firm revenue per employee divided by CPI the year before. What effect would you expect that variable to have on compensation? 12:52:46

A I expected to see a positive impact on that, meaning that when firms are having a good year, they share their revenues with their employees. But it comes out positive, but only 12:53:01

through the variable after that in row 30. 12:53:04

Q What do you mean?

A Row 30 represents the percent change in the revenue. You have both variables, the level and the percent change. If you want to know what the 12:53:22 current level effect is, you have to add those two coefficients, and it turns out to be positive.

I'm just saying that the sense of revenue sharing is correctly signed, not wrongly signed, when you consider row 30 in conjunction with row 29. 12:53:38

Q Would you agree that your conduct variable is reflecting in part years when the number of new hires is relatively high and the compensation increase is relatively low compared with the base period? 12:54:09

A I don't know that that's the case.

Q One way or the other?

A Well, this model has a bunch of other variables in there. You're picking out a couple there and asking me, is that the reason why we had 12:54:20 these conduct coefficients? But those conduct coefficients are dependent on everything that you have here, all 25 variables.

Q Can you tell us how the various conduct variables interact with each other? Strike that. 12:54:34

Can you tell us how the various variables that we've just talked about, lines 24 through 30, interact with each other? 12:54:39

A I don't know what you mean by "interact with each other." 12:54:51

Q Well, you said that this isn't a simple correlation, it's a partial correlation, and there's interaction between the defendant -- between the variables.

A Between the dependent variable and these variables. So you're trying to explain the movements in compensation based on things that are happening at the individual level, getting older, more tenure, being male or female, things that are happening at the industry level, and things that are happening at the firm level. 12:55:02 12:55:17

So there's a long list of variables that are intended to capture the most significant components of variability and annual compensation.

And I would say that everything I've said is contingent on the fact that we have these lag variables that make it very difficult to interpret the coefficients. 12:55:31

And as you know, I was very critical of your expert Stiroh who completely misinterpreted row 12:55:41

19 as having the wrong sign on the age variable because she didn't understand the role that rows 5 to 18 play, and in effect changing the dependent variable in a very complex way. 12:55:47

Q Let me move to strike that last paragraph as nonresponsive. 12:56:01

What I'm trying to get at is, can you tell us as you sit here today how these various variables are affecting compensation charged by -- or paid by these seven companies? 12:56:18

I mean, you've said it's very complex.

A Let's take the age variable then because I know that age has a positive effect on earnings. I think -- I know that data has a feature, that generally speaking, the older employees are paid more up to about age 55. And therefore I know the coefficient can't be negative if that variable -- that row 19, even though the estimate is negative, I know it can't be negative because the data doesn't have that feature. 12:56:31 12:56:47

So that's what forced me to understand that that coefficient isn't answering the simple-minded question like the simple-minded questions you're asking me on a variable-by-variable basis. It's a complex multivariate system that we 12:57:00

have here. 12:57:05

Q But my question is, can you explain to us in words that a jury can understand, for example, that I could understand, what is driving -- let me ask you a different question. 12:57:19

What do you think is driving the results that you find in your regression?

A And you won't let me just say the data are what the data are.

Q If that's the best you can do, that's 12:57:31 fine.

A Well, the basic thing I've explained before is, the damages come from a comparison of the -- during the period when the agreements were in effect with the before and after to try to see 12:57:46 whether the path of compensation -- the levels of compensation in the during period behaved differently than they did in the before and after.

And "differently" doesn't mean simple-minded. It means controlling for all the 12:58:02 other things that might have caused differences in the before and after.

So once you control for all those other things, then what's left over is the pure damage estimate. 12:58:14

Q 2003 to 2004. 13:30:36

A Well, 2003, 2004, you have to look back at the behavior of each of these key variables. The one that we know, because we've been looking at it so carefully is that the number of new hire rates, 13:30:50 hiring wasn't that high at that time.

My guess is that revenue was probably weak; that these firms have not recovered revenues growth the way they had later on when the tech boom came in 2004 and '5. 13:31:07

And then the San Jose information sector was still declining at that period of time, very soft. So 2003 and '4, they're still stuck in the mud as far as the tech sector was concerned.

Q And then from 2004 to 2005, what caused 13:31:32 compensation to be relatively flat as shown in Figure 3 at least?

A Again, I can't -- I cannot say for sure. All I can do is fall back into what my model would suggest. Then I'd have to confirm that, in fact, 13:31:48 that was the case.

Q And how would you do that last step?

A Well, you look at the predicted values in the model and you look at the drivers of the predicted values in the model. 13:32:01

Q Can you do that on a per-year basis? 13:32:03
A You could do that on a per-year basis.
Q Have you done that on a per-year basis?
A No, I have not, because I have not thought that disaggregating by defendant or by year was 13:32:11
going to be a productive activity.
Q So as you sit here, based on all the work that you have done, can you tell us what factors caused compensation to be flat from '04 to '05 as shown on Figure 13? 13:32:28
A Well, I could if I had time to go back and see exactly what the model says. But I can't off the top of my head translate that model into a precise statement about each one of these wiggles in these compensation displays. 13:32:41
Q I'm not asking about a precise statement. I'm just asking for an explanation.
As you sit here now, can you tell us why compensation was relatively flat from '04 to '05 as shown on Figure 3? 13:32:58
MR. GLACKIN: Object to the form.
THE WITNESS: All I can do is go back through these variables that are in the equation and talk about what role they're going to have in forming the predicted values for total compensation. 13:33:07

BY MR. MITTELSTAEDT: 13:33:13

Q If you look at line 24 on Figure 3, the D log of information sector employment in San Jose --

MR. GLACKIN: You mean Exhibit 3?

MR. MITTELSTAEDT: Exhibit 3. Thank you. 13:33:22

Q -- and you get an estimated coefficient of 1.8 something, what does that tell you about 2004 and 2005 in particular?

A I thought we were just looking at that San Jose variable. 13:33:50

Q That was I think Figure 17, wasn't it? Yes. Page 63.

A So the -- what period of time are we talking about? From 2003 to 2004?

Q Yes. 13:34:10

A So from 2003 to 2004, that San Jose variable was rising. And the -- actually, the percent change was -- which was negative was now going positive. So that would have been a contributor to wage increases during that period of 13:34:30 time per the model.

Q And what was causing San Jose employment to increase?

A Well, to me, that's the industry recovery. You had a terrible tech bust. You had the tech boom 13:34:43

in 1998, 1999, where every firm in the country, almost around the world, was trying to produce the coolest website, and the profitability was very weak on the web, and the result is you had a tech bust in 2000, 2001. 13:34:48 13:35:02

Q And let's focus on the next years, 2004 to 2005. What caused the "but for" -- excuse me. What caused compensation to remain relatively flat from '04 to '05 as shown on Figure 3?

A Well, Figure 3 has a different -- has more of a slope in the "but for" world than the actual world. So part of the actual is a consequence of the agreements. Part of the weakness in wage formation during that period of time is attributable to the agreements. 13:35:19 13:35:39

And then otherwise, it's the same sort of variables. 2005 had very high technical class hiring. You had very strong job growth in the San Jose information sector. I don't know about the other variable. The revenue variables I don't see in front of me. 13:36:00

Q Okay. So your top line on Figure 3 is designed to show what your regression says compensation would have been in the conduct period if compensation had kept the same relationship to 13:36:20

your other variables during that period that it had in the before and after period, basically. 13:36:23

A I'm trying to think if that's right. I think that's correct.

Q So my question is, for that first year when you show a difference between the actual compensation and the "but for" compensation, what variables had the relationship with actual compensation changed in that time period compared with the base period to account for this difference? 13:36:43 13:37:02

A Well, all the variables together account for this difference. So then we've got to figure out which one accounts for most of the differences, is what you want me to do. And that's fraught with difficulty. 13:37:16

But I was speculating it was the variables that had the biggest T stats, but that may not be the case for this particular year. It might be something else that was the ultimate driver.

But the model embodies the answer to your question in a way that I can't get to as I sit here now. I'd have to carry out the exercise to find out exactly what it is that produces the outcomes here. 13:37:27

In other words, we've got I don't know how many hundred thousands of observations. We've got 13:37:43

277,000 observations in this regression. And in principle, you're going to have to study all of those to find out what was different during that time and compare it to the pre-period and the post period. 13:37:46 13:38:03

Q If I ask you the same question for the other years in the conduct period, the answer would be the same, I assume.

A It would be the same, yes.

MR. GLACKIN: I'm sorry, Bob. If you're moving on, can I get my page back? Thank you. 13:38:13

BY MR. MITTELSTAEDT:

Q So when you say that -- well, you've identified the three variables with the largest T value, and they range from 2.7, 3.9, negative 4.8. 13:38:47

Based on those T values, are you comfortable saying which variable had the biggest impact on your regression results?

A No, not on a year-by-year basis, because then you have to look at the coefficients. And you have to compare the coefficients with the variability in that variable on a year-by-year basis, which you and I can't do by looking at that Exhibit 3. 13:39:10

Q So if I ask you the same types of 13:39:21

So changing the estimate is changing the conduct coefficients. So I know, generally speaking, the variables that are going to have the biggest impact on the conduct coefficients are the ones with the biggest Ts. That's why my mind -- 13:45:25 13:45:36
that's why I flowed through those. But it's not a sure thing.

Q I was trying to ask a related question, which is, in identifying the variable that has the greatest impact, in addition to looking at the T value, do you also look at the coefficient? 13:45:50

A Absolutely.

Q And so with total number of new hires having the highest T value, albeit a negative one, does the size of the coefficient change your view on total new hires being the most important variable? 13:46:09

A No. I don't think you can tell because you have to multiply that coefficient times the relevant data for whatever year you're interested in. 13:46:24

So it depends on the level and the change of that variable. You can't really read too much into coefficients. That's why --

Q I'm just asking that. I'm not --

A Okay. 13:46:34

Q What were you going to say? 13:46:36

A That's why I look at the T stats. The T stats are designed to be comparable across variables, and the coefficients are not because they're different scales. 13:46:44

Q Okay. So when you look at this, one conclusion you draw is that probably the change in total number of new hires -- the change in the relationship or the association between number of new hires and compensation in the during period, in 13:47:06 the conduct period, compared with the base period is the biggest driver of the results of the regression.

A And I mean that in a very specific way, which we've already talked about here this morning, which is that if you omit that new hire variable, 13:47:21 you're likely to have a big impact on estimated damages. You'd have a big impact on these conduct coefficients because that's what happens when you omit the most important variables measured by the T stat. 13:47:35

That, by the way, seems like the best way of determining which variables are the most important.

Q I guess what I'm trying to do is go from what I think, with all respect, is a technical 13:47:44

explanation and asking whether just in lay terms you can translate that into a conclusion that total new hires -- just what I said -- that the change in relationship between total new hires and compensation in the during period is the biggest driver of the regression results. 13:47:47 13:48:02

MR. GLACKIN: Object to the form.

THE WITNESS: I hear your questions. I think they're good questions. But -- and they may well serve the jury to have them well answered. 13:48:13

But those are not answerable just by reading the Exhibit 3. I'm speculating as to how it would be carried out.

MR. MITTELSTAEDT: We need to change the tape. 13:48:31

THE VIDEO OPERATOR: This marks the end of Volume IV, Media No. 3, in the deposition of Dr. Edward E. Leamer. The time is 1:48 p.m. We're off the record.

(Recess, 1:48 p.m. - 2:02 p.m.) 13:48:40

THE VIDEO OPERATOR: We are back on the record at 2:02 p.m. This marks the beginning of Volume IV, Media No. 4, of the deposition of Dr. Edward E. Leamer.

Please continue. 14:02:38

BY MR. MITTELSTAEDT: 14:02:41

Q When we broke, you had just complimented me on my good question. You said the jury would be well served by hearing the answer. So let me ask it again. 14:02:52

Is it your best conclusion that the principle driver of your regression results is that the relationship between total new hires and compensation changed in the conduct period relative to the before and after period? 14:03:13

A I think that's a hypothesis that has some merit to it, but I prefer not to say that that's the case. I'd prefer actually to explore to see if it is indeed the case.

And there's reasons to think it would be, 14:03:26 which is the big T stat for that new hire variable, and the fact that we already know that if you omit that variable, you have huge impacts on the damages.

But still, I'd rather reserve judgment on that, to do the decomposition of this complex 14:03:41 equation correctly rather than at a surface level.

Q Just so we're clear, have you done that so far?

A No, I have not.

Q What would you do to do that? 14:03:55

A Well, you have the predicted values with these variables turned on and off to see which one is the major contributor to the predicted outcomes. 14:03:57

Q Do you think that would be useful to do?

A I definitely think it's interesting. The usefulness is something that would be determined later. 14:04:14

Q How long does it take to do that?

A Not too long to do that.

Q Any particular reason you haven't done it so far? 14:04:23

A I guess I wasn't adequately thinking exactly what the jury would find most useful. I was thinking more as a statistician, which is these numerical displays, and not thinking of the most effective visual displays that would be -- that would work best in a jury setting. 14:04:35

Q As an economist, can you think of any reason why the relationship between total new hires and compensation would change from one year to the next? 14:04:50

A I think that change isn't the way to say it. It's that the -- the relationship could be exactly the same, which would be a different level. It might be a positive relationship in a before and 14:05:11

after period; in the during period, it's a positive relationship that instead of being the same level, it's lower. So it's still the same relationship occurring in a during period. It's just that for any given level of that driver variable, the compensation is lower. 14:05:13 14:05:26

Q Let me see if I understand that. We're talking about total number of new hires?

A Whichever variable it is, yeah. That's fine. Total number of new hires. 14:05:45

Q Okay. And so what you're saying is it could be in the base period there's, you know, 100 new hires and compensation goes up by $100, and then in the conduct period, there could be 50 new hires and compensation goes up by $50? 14:06:02

A Yes. But it's not the -- the coefficient stays the same. Any one of these variables has the same coefficient in the before, during and after periods. So it's not like the relationship changed. The relationship is still linear. It's that the whole level has shifted down. 14:06:23

Q So as you sit here today, based on all the work you've done, can you tell us how the relationship changed or whether it was just the level changed or whatever else happened that was 14:06:40

different with respect to that variable and compensation in the during period? 14:06:44

MR. GLACKIN: Objection to form.

THE WITNESS: You can't really do it on that variable, but you can do it on the collective variables, the whole collection. 14:06:52

But as I said before, these T stats to some extent tell you which are the most important variables for forming the predicted compensation.

BY MR. MITTELSTAEDT: 14:07:08

Q Let's try and get at the same thing by using total number of transfers among defendants.

Actually, before we do that, Exhibit 114 was the chart showing new hires by defendant versus total number of new hires. 14:07:28

You'll see that from 2005 to 2006, the number of new hires by Intel dropped a lot, and number of new hires at Google went the other direction. Right?

A That's correct. 14:07:50

Q And why was that?

A Well, Google was an up and coming firm that was expanding throughout this whole period of time. Intel was more mature, and actually, if I recall correctly, had declining total payrolls. 14:08:02

Q And then from 2007 to 2008, Intel increased its new hires and Google decreased its new hires. Why was that? 14:08:05

A I can't tell you on a year-by-year basis.

Q Going to the total number -- excuse me. 14:08:24

Going to the number of transfers among defendants, your line 25 on Exhibit 3, can you tell us how the relationship or association between that variable and compensation changed during the conduct period relative to the base period? 14:08:46

A Again, it's a shift of the relationship. It's not -- the relationship hasn't changed. It's shifted up or down. That's what the regression is looking for. It's looking for a shift in the relationship. 14:09:01

Q And by "shift in the relationship," you mean instead of -- give me an example of how that relationship between those two variables would change.

A This coefficient on -- I forget what variable. Oh, the poaching variable, which is row 25. 14:09:11

Q Have you always called that the poaching variable or is that something new?

A No, I've always -- 14:09:26

the number that Dr. Stiroh has produced? 15:40:57

Q Yes. Or if that's too difficult --

A I'm not so sure I can do that.

Q If that's too difficult, let me ask you this way: What do you think accounts for the large 15:41:06 change that Stiroh finds?

A I'd be speculating. I have not actually studied that.

One effect is definitely what you describe, which is that in 2005, it was losing 15:41:23 damages as a consequence of that. But I don't think it explains the whole amount.

Her number is 1.778 billion compared to 3.064 in my model.

So it's not just that. It's somehow the 15:41:40 way the model is being estimated, re-estimated, to reduce the impact of damages, reduce the coefficient on the conduct variable. And that's a complex question.

I know that's going on, but I don't know 15:41:53 exactly why, what feature is going on that produces that outcome.

Q You know this regression pretty well, right?

A Well -- 15:42:03

MR. GLACKIN: Object to the form. 15:42:07

THE WITNESS: Like I said --

BY MR. MITTELSTAEDT:

Q You spent 800 hours on this, right?

A I did. 15:42:12

Q So you've got an idea how your regression works, right?

MR. GLACKIN: Object to the form.

THE WITNESS: That doesn't give me the ability to know exactly what would happen if I 15:42:18 omitted a variable or changed a variable or added a variable.

BY MR. MITTELSTAEDT:

Q So what's your best explanation sitting here today as to why moving the Intel agreement back 15:42:31 by one year has such a large effect on the damage calculation?

MR. GLACKIN: Object to the form.

THE WITNESS: I prefer not to speculate.

BY MR. MITTELSTAEDT: 15:42:47

Q Well, I'm asking you to speculate if that's what it takes. What's your speculation?

MR. GLACKIN: Object to the form.

THE WITNESS: I can't do it. I think it's too complex a question. It requires some serious 15:42:57

work. You've got to unravel what's going on in the regression. And we already know how hard it is to understand multivariate regressions. So I just can't do it. 15:43:00

BY MR. MITTELSTAEDT: 15:43:10

Q Figure 20, page 69, please. This Figure 20 says Dr. Stiroh's median wage does not track defendants' compensation closely.

What is the significance of that assertion? 15:43:29

A Well, it's an unlikely variable to be added to the equation.

Q Why is that?

A It doesn't track the dependent variable very well. The dependent variable is not well tracked by this particular median wage variable. 15:43:42

Q How can you tell that?

A The red line represents the national software occupation salary. I'm sorry. The blue line is the Stiroh number, and it has this bump up in 2006, a bump down in 2007, a bump up in 2008, and it's flat in 2009. That's not like the base salaries. 15:43:59

By the way, this is -- her number is base salary, not total compensation. So that's why we're 15:44:18

comparing it to base salary here, not total comp. 15:44:21

Q But you've got fluctuations. I thought you told me earlier that fluctuations, volatility, is useful in doing a regression.

A Only if it conforms with the volatility of 15:44:33 the dependent variable. So I'm just saying this image is not very promising with regard to the use of that median wage.

Q So which of your variables closely tracks defendants' compensation? 15:44:47

A Well, they do collectively. They do collectively but no individual variable does a very good job by itself.

Q How do you know they do it collectively?

A Because the R squared is .868. 15:45:17

Q Well, but so how can you criticize use of median wage because it individually does not closely track defendants' compensation when your variables individually don't do that, either?

A Well, this is a warm-up to the real test. 15:45:41 The real test is putting it into a regression equation and see if it works.

Q Okay. But I'm still at the warm-up stage.

A So the first step in looking at a new variable is to make a plot like this to see if you 15:45:58

I, the undersigned, a Certified Shorthand Reporter of the State of California, do hereby certify:

That the foregoing proceedings were taken before me at the time and place herein set forth; that any witnesses in the foregoing proceedings, prior to testifying, were placed under oath; that a verbatim record of the proceedings was made by me using machine shorthand which was thereafter transcribed under my direction; that the foregoing is an accurate transcription thereof; that before completion of the deposition, review of the transcript was not requested. If requested, any changes made by the deponent (and provided to the reporter) during the period allowed are appended hereto.

I further certify that I am neither financially interested in the action nor a relative or employee of any attorney or party to this action.

IN WITNESS WHEREOF, I have this date subscribed my name.

Dated: January 3, 2014

CARLA SOARES

CSR No. 5908